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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/050,260

01/16/2002

Horst Greiner

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06/17/2004

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER

CARIASO, ALAN B

ART UNIT

PAPER NUMBER

2875

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/050,260

Applicant(s)

GREINER, HORST

Examiner

Alan Cariaso

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 18-21 is/are rejected.
- 7) ☒ Claim(s) 16 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Receipt of applicant's amendment filed April 2, 2004 is acknowledged. Claims 1 and 8-10 are amended. New claims 13-21 are submitted. Claims 1-21 are pending.

Claim Objections

2. Claims 8, 15 and 19 are objected to because of the following informalities:
3. Claim 8, the "side walls" (lines 6 & 8) and "the side faces" (line 11) are unclear as being the same part or distinct parts of either the waveguide plate or the cavity.
4. Claim 15, line 2, "side faces" are unclear as being the same as or different from "at least one side wall" in preceding claim 13, line 5.
5. Claim 19, line 2, "another reflecting layer" is unclear as being the same as or different from the "second reflecting layer" in preceding claim 13, line 9.
6. Appropriate correction is required.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-14 and 19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10/050,249 in view of KAWANO et al (US 6,404,131). Claims 1-14 and 19 of the present application no. 10/050,260 are similar to claims 1-20 of co-pending application no. 10/050,249, except they do not claim light sources of different colors comprising a plurality of red, green, and blue light emitting diodes which are distributed such that no light sources of the same color lie in mutually adjoining cavities.

9. Kawano et al. teach a plurality of light emitting diodes comprised of a plurality of red, green and blue light emitting diodes (column 12, lines 32 to 34) which are distributed such that no light sources of the same color lie in mutually adjoining cavities (figures 14 to 17, 19, 20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the light sources of claims 1-14 and 19 of copending application '260 with the light sources comprised of red, green and blue light emitting diodes which are distributed such that no light sources of the same color lie in mutually adjoining cavities, as shown by Kawano et al., in order to provide desired color(s) at a uniform brightness throughout the area of the light emission surface.

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1, 3-7, 10-15, 18, 19 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by KAWANO et al (US 6,404,131).

12. KAWANO discloses a light emission surface (11a-fig.5 or 22a-fig.7); a plurality of substantially point-shaped light-sources (2a-fig.7); an optical waveguide plate (12) into which a plurality of cavities (47-fig.12) is provided, each cavity accommodating a light source and including an upper side (10-fig.5) closest to the light emission surface (11a) and side walls that allow coupling of light therethrough into the optical waveguide plate (12), said upper side being covered with a first reflecting layer (10), said cavities (47) extending only partially through the optical waveguide plate (12) toward the light emission surface (11a,22a), given the structure, a portion of light coupled from one of the cavities through the side walls is capable of reaching and being emitted from an area of the light emission surface directly above one of the cavities; wherein the cavities (13 or 47) are each covered with a second reflecting layer (16-fig.5 or 23-fig.7) on their lower side opposite their upper side; wherein the cavities are substantially cylindrical in shape (figs.7,8); wherein the cavities are provided in the lower side of the optical

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waveguide plate (12-fig.7); wherein the light sources are light emitting diodes (2a); wherein the second reflecting layer (16,23) extends over the side face (17b-fig.5,24b-fig.7) and the lower side (11b,22b) of the optical waveguide plate (12); wherein the first reflecting layer (10) extends further with a second portion along the side walls of the cavity (figs.5 or 7); wherein the edges of the cavities (47,13) situated opposite the upper side (10) are surrounded by another reflecting layer (16 or 23).

13. As for claims 12 and 21, the recitations "A liquid crystal display device" and "A display device" have not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). However, it appears that KAWANO designates the light device as a display device (cols.2-3).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 2 and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over KAWANO et al (US 6,404,131).

16. KAWANO discloses the claimed invention including the side walls of the cavities (13 or 47) are substantially perpendicular to the light emission surface (11a,22a).

However, KAWANO does not disclose the upper sides of the cavities being substantially parallel to the light emission surface.

17. It would have been obvious to of ordinary skill in the art at the time the invention was made to provide light or display device of KAWANO including upper sides of the cavities being substantially parallel to the light emission surface, since it has been held that a mere change in shape of an element is generally recognized as being within the level of ordinary skill in the art when the change in shape is not significant to the function of the combination. Further, one would have been motivated to select the shape of flat upper side to accommodate other LEDs or point light sources which may not exactly fit the given upper curvature of the cavities.

Allowable Subject Matter

18. Claims 16 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

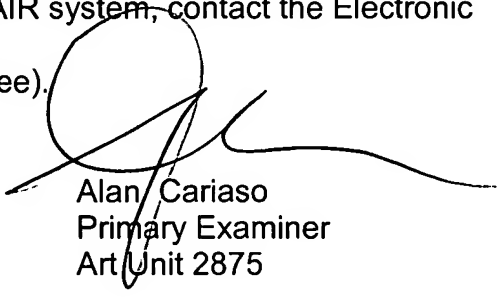
19. Applicant's arguments with respect to at least claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan Cariaso whose telephone number is (571) 272-2366. The examiner can normally be reached on 9-5:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alan Cariaso
Primary Examiner
Art Unit 2875

AC
June 14, 2004